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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/544,283	04/06/2000	Toshiaki Sakaguchi	ASA-873	8159

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EXAMINER	
PHAM, THOMAS K	
ART UNIT	**PAPER NUMBER**
2121	6

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/544,283	Applicant(s) SAKAGUCHI ET AL.	
	Examiner Thomas K Pham	Art Unit 2121	

-- The MAILING DATE of this communication app ars on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 June 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Response to Amendment

1. This action is in response to request for re-consideration filed on 6/19/2003

2. New claim 11 filed by the applicant has been entered.

3. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

DETAILED ACTION

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-3, 5 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Smirnov et al. U.S. Patent No. 6,279,009 (hereinafter Smirnov).

Regarding claim 1

Smirnov teaches

a method for managing an actual execution workflow for executing a flow of work on the basis of a virtual workflow for monitoring said actual execution workflow (col. 10 lines 26-28, "Model 130 ... it represents."), said actual execution workflow and said virtual workflow including a plurality of nodes, respectively, comprising the steps of:

- selecting a processing node of said actual execution workflow to make the node thus selected be linked with a node of said virtual workflow (col. 5 lines 28-33, "Regardless of ... production plans.");
- specifying a node of said virtual workflow (col. 5 lines 34-37, "Within the virtual ... the task node.");
- acquiring a node of said actual execution workflow linked with the node thus specified (col. 5 lines 56-64, "During processing ... in the model 10."); and
- outputting a progress state of the acquired node as a progress state of the specified node of said virtual workflow (col. 6 line 62 to col. 7 line 14, "FIG. 2 presents ... alternative processes.").

Regarding claim 2

Smirnov teaches

- setting a user's privilege of operation at each node of said virtual workflow (col. 10 lines 28-32, "as various operators ... model 130 is updated."); and
- registering the user's privilege of operation thus set in a virtual workflow definition for defining said virtual workflow (col. 9 lines 44-47, "FIG. 4C illustrates ... printing machines.").

Regarding claim 3

Smirnov teaches

- determining an actual execution workflow definition for defining said actual execution workflow by using an attribute of a virtual workflow definition for defining said virtual workflow (col. 8 lines 17-31, "Although model 20 ... in real time."); and
- inputting execution information of said actual execution workflow by using the actual execution workflow definition thus determined (col. 10 lines 1-4, "Note that the ... input/output system.").

Regarding claim 5

Smirnov teaches

- there are a plurality of virtual workflow definitions for defining said virtual workflow, said method further comprising the steps of: inputting information for selecting virtual workflow definition (col. 10 lines 1-4, "Note that the ... input/output system."); and
- determining a virtual workflow definition on the basis of said input information (col. 1 line 62 to col. 2 line 6, "In general ... new job request.").

Regarding claim 11

Smirnov teaches the steps of:

- if a privilege of reference to the acquired node is not permitted to a user requesting the progress state of the specified node, searching the nodes of said actual execution workflow for a previous node closest to the acquired node and having a privilege of reference permitted to the user (col. 5 lines 56-64, "During processing ... in the model 10."); and

- outputting a progress state of the previous node as a progress state of the specified node of said virtual workflow (col. 6 line 62 to col. 7 line 14, "FIG. 2 presents ... alternative processes.").

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 4 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smirnov in view of Cheng U.S. Patent No. 6,067,548.

Regarding claim 4

Smirnov teaches a virtual workflow managing system for managing an actual execution workflow for executing a flow of work accessing an actual execution workflow definition for defining said actual execution workflow and a virtual workflow definition for defining a virtual workflow for monitoring said actual execution workflow, said actual execution workflow and said virtual workflow including a plurality of nodes, respectively, but does not teach the actual workflow comprising: a storage unit for storing said actual execution workflow definition containing an ID of said actual execution workflow and an ID of each of nodes contained in said actual execution workflow; a storage unit for storing virtual workflow definition containing an ID of said virtual workflow, an ID of each of nodes contained in said virtual workflow and access privilege information given to a user using said virtual workflow definition at each node of said virtual workflow; and a workflow link definition storage unit for storing an ID of a link

linking an ID of a node of said virtual workflow with an ID of a corresponding node selected from said actual execution workflow. However, Cheng teaches a storage unit for storing said workflow definition containing an security ID of said workflow and an ID of each of nodes contained in said workflow (col. 4 lines 21-34, "The present ... linking means."); and a workflow link definition storage unit for storing an ID of a link linking an ID of a node of said virtual workflow with an ID of a corresponding node selected from said actual execution workflow (col. 4 lines 40-48, "The utility ... virtual linking means."). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the storage unit of Cheng with the workflow system of Smirnov because it would provide for storing the workflow definition and security ID in a secured database in order to collaborate software for authentication, authorization and dynamic job assignment.

Regarding claim 6

Smirnov teaches a method for managing an actual execution workflow for executing a flow of work on the basis of a virtual workflow for monitoring said actual execution workflow, said actual execution workflow and said virtual workflow including a plurality of nodes, respectively, a method comprising the steps of: searching a node of said actual execution workflow corresponding to a node of said virtual workflow specified by said client, based on said workflow link definition (col. 5 lines 56-64, "During processing ... in the model 10."); and outputting a progress state of said searched node of said actual execution workflow as a progress state of said specified node of said virtual workflow to said client but does not teach a workflow system having a client and a server (col. 6 line 62 to col. 7 line 14, "FIG. 2 presents ... alternative processes.") but does not teach a workflow system having a client and a server, a

method comprising the steps of: holding a virtual workflow definition for defining nodes of said virtual workflow according to purpose of use by said client, an actual execution, workflow definition for defining processing nodes of said actual execution workflow and a workflow link definition for linking said virtual workflow definition of nodes of said virtual workflow with said actual workflow definition of selected nodes of said actual execution workflow, on the basis of an indication given from said client. However, Cheng teaches a workflow system having a client and a server (col. 11 lines 59-61, "Multiple servers ... within a domain."), a method comprising the steps of: holding a virtual workflow definition for defining nodes of said virtual workflow according to purpose of use by said client, an actual execution workflow definition for defining processing nodes of said actual execution workflow and a workflow link definition for linking said virtual workflow definition of nodes of said virtual workflow with said actual workflow definition of selected nodes of said actual execution workflow, on the basis of an indication given from said client (col. 11 lines 24-42, "The database ... database 152."). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method of Cheng with the workflow system of Smirnov because it would provide for storing the workflow definition and security ID in a secured database in order to collaborate software for authentication, authorization and dynamic job assignment.

Regarding claim 7

Smirnov teaches a server for managing an actual execution workflow for executing a flow of work on the basis of a virtual workflow for monitoring said actual execution workflow, said actual execution workflow and said virtual workflow including a plurality of nodes, respectively, the server comprising: a processing unit for searching a node of said actual execution workflow

corresponding to a node of said virtual workflow specified by said client, based on said workflow link definition (col. 5 lines 56-64, "During processing ... in the model 10."); and a processing unit for outputting a progress state of said searched node of said actual execution workflow as a progress state of said specified node of said virtual workflow to said client (col. 6 line 62 to col. 7 line 14, "FIG. 2 presents ... alternative processes.") but does not teach a system having a client and a server, the server comprising: an information storage unit for storing a virtual workflow definition for defining nodes of said virtual workflow according to a purpose of use by said client, an actual workflow definition for defining processing nodes of said actual execution workflow and a workflow link definition for linking said virtual workflow definition of nodes of said virtual workflow with said, actual workflow definition of selected nodes of said actual execution workflow. However, Cheng teaches a system having a client and a server (col. 11 lines 59-61, "Multiple servers ... within a domain."), the server comprising: an information storage unit for storing a virtual workflow definition for defining nodes of said virtual workflow according to a purpose of use by said client, an actual workflow definition for defining processing nodes of said actual execution workflow and a workflow link definition for linking said virtual workflow definition of nodes of said virtual workflow with said, actual workflow definition of selected nodes of said actual execution workflow (col. 7 lines 54-66, "The present ... class definition."). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the server of Cheng with the workflow system of Smirnov because it would provide for storing the workflow definition and security ID in a secured database in order to collaborate software for authentication, authorization and dynamic job assignment.

Regarding claim 8

Smirnov teaches in a storage medium readable by a computer for storing a program of a method for managing an actual execution workflow for executing a flow of work on the basis of a virtual workflow for monitoring said actual execution workflow, said actual execution workflow and said virtual workflow including a plurality of nodes, respectively, said method comprising the steps of: searching a node of said actual execution workflow corresponding to a node of said virtual workflow specified by said client, based on said workflow kink definition (col. 5 lines 56-64, "During processing ... in the model 10."); and outputting a progress state of said searched node of said actual execution workflow as a progress state of said specified node of said virtual workflow to said client (col. 6 line 62 to col. 7 line 14, "FIG. 2 presents ... alternative processes.") but does not teach a workflow system having a client and said server, with method comprising the steps of: holding a virtual workflow definition for defining nodes of said virtual workflow according to a purpose of use by said client, an actual execution workflow definition for defining processing nodes of said actual execution workflow and a workflow link definition for linking said virtual workflow definition of nodes of said virtual workflow with said actual workflow definition of selected nodes of said actual execution workflow, based on an indication given from said client. However, Cheng teaches a workflow system having a client and said server (col. 11 lines 59-61, "Multiple servers ... within a domain."), with method comprising the steps of: holding a virtual workflow definition for defining nodes of said virtual workflow according to a purpose of use by said client, an actual execution workflow definition for defining processing nodes of said actual execution workflow and a workflow link definition for linking said virtual workflow definition of nodes of said virtual workflow with said actual workflow

definition of selected nodes of said actual execution workflow, based on an indication given from said client (col. 7 lines 54-66, "The present ... class definition."). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the server of Cheng with the workflow system of Smirnov because it would provide for storing the workflow definition and security ID in a secured database in order to collaborate software for authentication, authorization and dynamic job assignment.

Regarding claim 9

Smirnov teaches virtual and actual workflow definition but does not teach the method of holding information about a type of a privilege of operation by said client to said actual workflow definition at each node of said virtual workflow, said type being at least one privilege selected from a display privilege, a reference privilege and an input privilege. However, Cheng teaches the workflow definition holding information about a privilege of operation by said client is defined by the administrator for different roles to control the process (col. 6 lines 17-25, "Most workflow ... task authorization."). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the server of Cheng with the workflow system of Smirnov because it would provide for storing the roles of different privileges into the workflow definition as defined by the administrator in order to control different task assignment and task authorization.

Regarding claim 10

Smirnov teaches the method as claimed in claim 6, wherein each of said nodes contained in said virtual workflow definition is linked with a node selected from a plurality of actual workflow definitions (col. 5 lines 56-64, "During processing ... the model 10.").

Response to Arguments

In the remark the applicant argues that cited reference fails to disclose:

I) "the linking of nodes between actual execution workflow and virtual workflow and monitoring or outputting the process state of an acquired node of the actual execution workflow that is linked with a specified node of the virtual workflow."

In response to applicant's argument,

I) It was noted that prior art (Smirnov et al. USPN 6,272,009) teaches (column 5, lines 30-31, "model 10 may be continuously updated with information regarding the real-world manufacturing environment that it represents.") and see abstract ("... the model may be configured to receive updates reflecting changes in the real-world manufacturing environment ..."). Therefore, it is clear the nodes between the actual execution workflow and virtual workflow are linked and continuously monitor in order to update with new information regarding the real-world manufacturing environment. Thus, limitations are met by the reference.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thomas Pham; whose telephone number is (703) 305-7587 and fax number is (703) 746-8874. The examiner can normally be reached on Monday-Thursday and every other Friday from 7:30AM- 5:00PM EST or contact Supervisor, *Mr. Anil Khatri*, can be reached on *(703) 305-0282.*

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Thomas Pham
Patent Examiner

TP

August 27, 2003

ANIL KHATRI
SUPERVISORY PATENT EXAMINER